



PTO/SB/08a (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Institute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 2

**Complete if Known**

Application Number	09/721,414
Filing Date	November 22, 2000
First Named Inventor	Hiroaki Suga et al.
Art Unit	1635
Examiner Name	Dr. James Schultz
Attorney Docket Number	11520.0222

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup> Number <sup>5</sup> Kind Code <sup>6</sup> (if known)				
JS	A	WO 99/36517	22-07-1999	JENNE, Andreas		

Examiner  
Signature

JD Schultz

Date  
Considered

5-10-05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08b(05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 2

**Complete if Known**

Application Number	09/721,414
Filing Date	November 22, 2000
First Named Inventor	Hiroaki Suga et al.
Art Unit	
Examiner Name	Dr. James Schultz
Attorney Docket Number	11520.0222

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JS	B	ILLANGASEKARE, M. et al., Specific, rapid synthesis of Phe-RNA by RNA, Proceedings of the National Academy of Sciences of the United States of America, May 11, 1999, Vol. 96, No. 10, pp. 5470-5475	
↓	C	LEE, N. et al., Ribozyme-Catalyzed TRNA Aminoacylation, Nature Structural Biology, New York, NY, US, Vol. 7, No. 1, January 2000, pp. 28-33	
↓	D	SCHIMMEL, P. et al., Exiting an RNA world, Nature Structural Biology, January 2000, Vol. 7, No. 1, pp. 5-7	

Examiner  
Signature

JS Schultz

Date  
Considered

5-10-05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Please type a plus sign inside this box +

PTO/SB/08A(05/03)

Approved for use through 05/31/2003, OMB 0651-0031

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number	09/721,414
Filing Date	November 22, 2000
First Named Inventor	Suga, et al.
Art Unit	1635
Examiner Name	Dr. James Schultz
Attorney Docket Number	11520.0222

Sheet	1	of	2
-------	---	----	---

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 00/26517				
		<del>Duplicate</del>				

Examiner Signature	<i>JD Schultz</i>	Date Considered	5-10-05
--------------------	-------------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

BFLDOCS 1190202 v1

Please type a plus sign inside this box +

PTO/SB/08B(05/03)

Approved for use through 05/31/2003, OMB 0651-0031

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	09/721,414
Filing Date	November 22, 2000
First Named Inventor	Suga, et al.
Group Art Unit	1635
Examiner Name	Dr. James Schultz
Attorney Docket Number	11520.0222

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JDS	1	JENNE, et al., A novel ribozyme with ester transferase activity, Chemistry & Biology 1998, Vol. 5, No. 1, pg. 23-34.	
	2	LEE, et al., "Ribozyme-Catalyzed tRNA Aminoacylation", Nature Structural Biology, New York, NY, Vol. 7, No. 1, January 2000 (2000-01), pg. 28-33, XP002939339 ISSN: 1072-8368.	
	3	SCHIMMEL, et al., "Exiting an RNA world.", Nature Structural Biology, Jan. 2000, Vol. 7, No. 1, January 2000 (2000-01), pg. 5-7, XP002305387, ISSN: 1072-8368.	
	4	Supplemental European Search Report, EP 00 98 2217, 60 pg	
	5	ILLANGASEKARE, et al., Specific, rapid synthesis of Phe-RNA by RNA, Proc. Natl. Acad. Sci. USA, Vol. 96, May 1999, pg. 5470-5475.	

Not a proper  
reference

Examiner Signature	JDS Schultz	Date Considered	5-10-05
--------------------	-------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English Translation is attached.

Burden Hour Statement: The form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

~~PTO/SB/08A(08/00)~~

Approved for use through 10/31/2002, OMB 0651-0031

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
*(Use as many sheets as necessary)*

*(Use as many sheets as necessary)*

Application Number	09/721,414
--------------------	------------

<b>Filing Date</b>	11/22/2000
--------------------	------------

First Named Inventor	Suga, et al
----------------------	-------------

Group Art Unit	1645
----------------	------

**Examiner Name**

Attorney Docket Number	11520.0222
------------------------	------------

1

**of**

**2**

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

sd Schuster

Date  
Considered

5-10-05

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002, OMB 0651-0031

(Use as many sheets as necessary)

<b>Application Number</b>	09/721,414
<b>Filing Date</b>	11/22/2000
<b>First Named Inventor</b>	Suga, et al
<b>Group Art Unit</b>	1645
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	11520.0222

Sheet

2

of

2

**Examiner  
Initials\***

**Cite  
No. 1**

**Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.**

T2

JDS

1

FECHTER, et al. Ribozyme Processed tRNA Transcripts With Unfriendly Internal Promoter for T7 RNA Polymerase: Production and Activity. FEBS Letters 436 pp. 99-103 (1998).

2

ILLANGASEKARE, et al. Small-Molecule-Substrate Interactions With a Self-Aminoacylating Ribozyme. *J. Mol. Biol.* 268, pp. 631-639 (1997).

3

**ILLANGASEKARE, et al. Specific, Rapid Synthesis of Phe-RNA by RNA**  
Proc. Natl. Acad. Sci. USA, Vol., 96 pp. 5470-5475 (May, 1999).

RECEIVED

MAR - 7 2002

**COPY OF PAPERS**  
**ORIGINALLY FILED**

TECH CENTER 1600/2900

**Examiner  
Signature**

✓ D Schuch

Date Considered

5-10-05

\***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 Applicant is to place a check mark here if English Translation is attached.

**Burden Hour Statement:** The form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.** Send to the Assistant Commissioner for Patents, Washington, DC 20231.